

DATA ANALYSIS AND INFORMATION RESOURCE MANAGEMENT BRANCH

GOALS/ACTIVITIES

I. ANALYSIS

Economic Analysis/Ph.D. Support*

Child Health USA

Healthy People 2000

Special Reports

Early Discharge

Race/Ethnic Disparities

II. MODEL SYSTEMS

Data Utilization and Enhancement Grants*

Model Development

Model Data Sets

Health Outcomes/Risks/Services

Managed Care

Systems

MCH-Info

III. ENHANCE LOCAL/STATE/FEDERAL CAPACITY

Panel of Experts

Data Analysis Strategy

Cooperative Agreements

Training

Analytical Instruments

Regional Networking

Seminars

Teleconferences

Graduate Student Intern Program*

Epi Placement Program

Doctoral Support Via Economic Analysis Supplemental Training Grants

The Maternal and Child Health Bureau(MCHB) is directing significant attention to advancing and strengthening essential public health functions and to assisting State Title V and community MCH programs with enhancements of their analytic capability in the assessment of needs, monitoring of efforts and evaluation of outcome performance. One major issue related to this analytic activity is the need to improve the understanding of the economics of MCH services. This need for economic analysis includes: cost effectiveness and benefits; intervention production functions; measures and assessment of costs and outcome benefits associated with quality of care; modeling provider/user behaviors; health care financing related to access and/or health outcomes; assessment of alternative illness management scenarios; value of cost and benefits information; and ethical issues related to explicit policies of resource allocation. Despite increased publication of literature and interest in these fields of economics, there has been little development of that literature relevant to the MCH community.

The purpose of this limited competition is to provide supplemental grants for Maternal and Child Health Training in order to develop and promote economic analyses as a part of MCH health services planning and program operations. These supplemental grants to MCHB grantees in schools of public health are intended to attract MCH doctoral students to the field of health economics and to help support their scholarship and acquisition of the requisite knowledge base and skills. The supplement will provide for awards of up to \$18,000 each to doctoral candidates and postdoctoral fellows who elect a relevant MCH economic analysis issue as the basis for their research and dissertation.

The following Universities have received Economic Analysis Training Supplement Grants.

Continuing Supplements (Second Year)

University of Alabama
Department of Maternal and Child Health
School of Public Health
Birmingham, Alabama

Johns Hopkins University
School of Hygiene and Public Health
Baltimore, Maryland

University of North Carolina
Department of Maternal and Child Health
Chapel Hill, North Carolina

New Supplements (Awarded 7/97)

Harvard University
Department of Maternal and Child Health
Harvard School of Public Health
Boston, Massachusetts

University of Illinois @ Chicago
Community Health Sciences
School of Public Health
Chicago, Illinois

University of California (UCLA)
Community Health Sciences
School of Public Health
Los Angeles, California

University of Washington @ Seattle
Maternal and Child Health Program
School of Public Health and Community Medicine
Seattle, Washington

University of California @ Berkeley
Maternal and Child Health
School of Public Health
Berkeley, California

OVERVIEW OF 1997 NEW AND CONTINUING DATA UTILIZATION AND ENHANCEMENT (DUE) GRANT APPLICATIONS APPROVED FOR FUNDING

The purpose of this grant activity was to enable and empower State MCH and CSHCN programs and supporting entities to address and enhance the use of qualitative and quantitative analytic methods for local problem solving for women of child bearing age, infants, toddlers, children, adolescents, youth, children with special health care needs and their families. The awards are intended to supplement and/or complement existing activities initiated by the various applicants. One concept is that improving information collection and data analysis can be made by facilitating interchange between states, many of whom have already made considerable progress in developing information systems. In addition, many states and localities are rapidly modifying and improving their health care systems through managed care, waivers, insurance modifications, and the like. During this period of rapid change, those responsible for the health and well being of children and families need to sharpen their ability to identify emerging issues and changes in health outcomes in order to assure the delivery of comprehensive health care.

MCHB/DSEA/DAIRMB has developed a comprehensive maternal and child health data strategy that assists in these efforts by defining the need for uniform data sets, effecting necessary data linkages, and establishing uniform data collection and analysis among other components.

The Bureau has supported the development of individual information systems through several grant initiatives such as Data Utilization and Enhancement (DUE) grants. While there continues to be the need for development of information systems, resources for additional DUE SPRANS grants are limited. In 1996, the four categories in the DUE grant application were; (1) develop models, (2) adapt models, (3) economic costs and effectiveness, and (4) information technology. In 1997, the DUE grants were limited to the categories described below.

Category 1 - Develop, adapt and integrate a sentinel model and system to assess the benefits and risks to children and families health status resulting from State and private sector health and welfare reform and specifically managed care efforts, in terms of quantitative and qualitative measures focussed upon needs assessments, outcome measures, system performances, quality, efficacy, effectiveness and efficiency.

Category 2 - Analyze the economic implications of maternal and child health programs with the objective of augmenting the capacity of Federal, State and local policy staff to use, interpret and conduct economic assessments.

Category 3 - Enhance the use of information technologies with Federal, State and local MCH/CSHCN programs and agencies.

In the selection of awards, special consideration was given to those applicants identifying emerging issues resulting from health care structural and financial changes such as health care reform, managed care, waivers, etc. and their impact on mothers, children and families with particular attention to the under-served and/or those at high risk of health outcome problems in terms of comprehensive health care.

In 1997, a panel of reviewers assessed the DUE applications submitted to the Grants Management Office.

The panel recommended that three were eligible for funding by the Bureau. The projects selected were:

Project Title: Community Assessment of Needs and Health Systems Performance for CSHCN: A Public-Private Approach to Data Utilization and Enhancement for State and Local Health Departments

Category: One (1)

Submitted by: Children's Hospital and Medical Center

Location: Seattle, Washington

Project Title: West Michigan Community Interactive Information System

Category: Three (3)

Submitted by: Butterworth Health System

Location: Grand Rapids, Michigan

Project Title: Transportable MCH Information Internet Data Query Module: MatCHIM

Category: Three (3)

Submitted by: Utah Department of Health

Location: Salt Lake City, Utah

In addition, Twelve (12) non-competitive continuing grant applications were reviewed and approved for continued funding. They are:

Project Title: Monitoring Child Health in Medicaid Primary Health Care Case Management Systems in the State of Alabama

Submitted by: University of Alabama at Birmingham

Location: Birmingham, Alabama

Project Title: Childhood Disability: Assessing Equity of Different Definitions

Submitted by: Albert Einstein College of New York, Yeshiva University

Location: Bronx, New York

Project Title: Healthy Start Development Project

Submitted by: University of South Florida, College of Public Health

Location: Tampa, Florida

Project Title: A Model Geographic Information System to Enhance and Support MCH Data Analysis for Developing Comprehensive Systems of Care

Submitted by: New York State Department of Public Health, Division of Planning and Resource Development

Location: Albany, New York

Project Title: Cost Benefit Analysis of Enhanced Perinatal Support Services in Medicaid Managed Care

Submitted by: Institute for Health Policy Studies, University of California at San Francisco

Location: San Francisco, California

Project Title: Data Utilization and Enhancement of Data Systems for MCH Programs

Submitted by: Monroe County Health Department, MCH Services

Location: Rochester, New York

Project Title: *FIRSTLink* Data Utilization and Enhancement Initiative

Submitted by: Massachusetts Dep't of Public Health, Bureau of Family and Community Health

Location: Boston, Massachusetts

Project Title: Birth Record Enhancements of the New York State Medicaid Managed Care Encounter System

Submitted by: New York State Department of Health, Office of Managed Care

Location: Albany, New York

Project Title: DU&E: Enabling State and Locals To Enhance Use of Q&A for Problem Solving

Submitted by: Johns Hopkins University, School of Hygiene and Public Health, Dep't of Maternal and Child Health

Location: Baltimore, Maryland

Project Title: MCH-INFO Analytical Software Tool for Needs Assessment

Submitted by: University of Illinois at Chicago, Division of Specialized Care for Children

Location: Chicago, Illinois

Project Title: Prenatal Abstract Database

Submitted by: Mobile County Health Department

Location: Mobile, Alabama

Project Title: Children's Health Network

Submitted by: Hartford Primary Care Consortium

Location: Hartford, Connecticut

You will find the proposal abstracts for all of these projects attached for your perusal.

PROPOSAL ABSTRACT:

Project Title: Community Interactive Information System

Organization Name: DeVos Children's Hospital at Butterworth

Address: 100 Michigan NE, Grand Rapids, MI 49503

Project Co-Directors: Lindsay, Judith, MPA; Moore, Joseph, MD; Palusci, Vincent, MD; Roman, LeAnne, PhD

Phone: (616)391-2627

Years: Three years

From: 10/1/97 to 9/30/2000

PROBLEM: Each year the federal government and local community agencies invest extensive resources in attempts to improve the health and welfare of vulnerable women and children. Maternal and child health indicators have not shown dramatic improvement, in spite of federal and local investments. Technological advances in integrated information systems are now available and could assist communities in better defining and analyzing MCH problems, but few systems are in use. Data exists in multiple sources but is often Hidden in individual institutions records or not available for integration because of unique identifiers and codes. Medicaid managed care and welfare reform policies affecting vulnerable children and their families, require communities to track and identify potentially harmful trends as well as recognize improvement in indicators that suggest their prevention or re-designed services are paying off. A community MCH integrated information system, a community infrastructure that supports data sharing and analyses and the technical assistance resources to support adaptation from an individual to an integrated data system may help communities invest wisely with scarce economic resources.

GOALS AND OBJECTIVES: The purpose of this project is to use information technology to determine needs, focus interventions, and assess effectiveness of services in order to improve the health and development of vulnerable women and children. Three goals are identified: A) Create of a community infrastructure, linked to decision making bodies, to support the development of a integrated information system; B) Use information technology to create a community -based MCH information system that can be accessed by multiple stakeholders to enhance data analytic capabilities; C) Improve maternal and child health by assisting the community to enhance data collection, assess effectiveness of services and focus interventions.

Specific Objectives include: 1) By December, 1997, a data utilization enhancement (DUE) work group will be operational. 2) By December, 1997, four expert consultant teams will be operational. 3) By April, 1998, a minimum of 100 stakeholders will complete an educational workshop (Community Builder) to develop knowledge of systems thinking and integrated data systems. 4) By April, 1998, policies and procedures for the protection of client confidentiality, institutional privacy and standards for data quality and integrity will be on file. 5) During fiscal year 1998, a computer interactive software system (ACT toolkit) will be customized for MCH indicators selected by the community. 6) During fiscal year 1998, baseline information on MCH indicators selected by the community will be installed in the ACT toolkit. 7) During fiscal year 1998, 1999, and 2000, a minimum of twenty-five community agencies will receive technical assistance for using the information system (entering data, downloading from other sources, queries) and conducting data analyses. 8) During fiscal year 1999 and 2000, a MCH Community Interactive Information System will be operational. 9) During fiscal year 1998, a written report of analyses of baseline data on selected maternal and child health and service indicators will be on file with the oversight group. 10) In the first quarter of fiscal year 1999 and fiscal year 2000, a written report of consensus recommendations for modifying MCH services will be on file with the oversight group. 11) During fiscal year 1999 and 2000, a written report that includes analysis of changes in

MCH indicators will be filed with the oversight group. 12) During fiscal year 2000, a dissemination workshop of the project model will be available to interested parties with a specific focus on a thirteen county region in West Michigan.

METHODOLOGY: In order to develop and utilize a community interactive integrated information system three things are necessary. First, there must be a software data base system with specific MCH and service utilization indicator Roman, LeAnne, PhD s and a technological infrastructure to support multiple users. Next, a community infrastructure that assures the participation of key stakeholders with control over data resources must be in place. Finally, technical assistance and data analyses resources during the start-up period are necessary.

In order to embed the development of an MCH information system in the community, the project staff and collaborating partners will be designated a Data Utilization Enhancement work group of the county Family and Children's Coordinating Council. This council is a subgroup of the county Multi-purpose Collaborative Body who will be responsible for allocating MCH Block grant resources. Further, a coordinator will be hired to facilitate all aspects of negotiation, consensus building on interpretation of findings and recommendations for strategies to improve health status and service delivery. The coordinator will also design and implement an educational workshop that will assist stakeholders to gain new knowledge about systems thinking, integrated information systems, and cross-sector investments.

A newly developed community software data base system, ACT toolkit (a product of the national Health Care Forum), will be customized by the community to include comprehensive maternal and child health and service indicators. Further, extensive technical assistance will be offered to community agencies to collect baseline data from diverse sources of data and learn to utilize the software. A community data repository will be developed that can be accessed from multiple sites.

In order to guide the development and implementation of the system, four ~expert" consultant groups will be mobilized. Community Health Workers, low-income women who provide support and resources to underserved populations and share similar characteristics, will be hired as consultants. A group of university-based scientist representing epidemiology, development science, biostatistics and community development will form another team. Representatives from the state health department will also provide knowledge resources. Last, the national Health Care Forum will provide consultation on software customization and on-site workshops for community stakeholders.

COORDINATION: Project management will be provided by four Co-Directors from DeVos Children's Hospital: the Medical Director of the Child Protection Team (pediatrician); the Medical Director of Prevention Outreach (obstetrician) and the Co-Directors of Prevention Outreach (nurse, MPA and nurse, PhD). A community project coordinator will facilitate all aspects of the project on a day to day basis.

EVALUATION: Process and outcome measurement of all aspects of the project will be accomplished. Multiple methods (is. survey, case study, trend analysis) will used. United Way and Health Department evaluation specialists will conduct the evaluation with support from the expert consultation teams.

PROJECT ABSTRACT:

Project Title: Community Assessment of Needs and Health Systems
Performance for Children with Special Health Care Needs: A

Public-Private Approach to Data Utilization Enhancement for State and Local Health Departments

Organization Name: Center for Childhood Chronic Conditions

Address: Children's Hospital & Medical Center, 4800 Sand Point Way NE, CM-09, Seattle, WA 98105

Project Director: Jeanette Valentine, Ph.D.

Phone: (206) 527-5732

Years: Three (1998, 1999, 2000)

From: 10/1/1997 to 9/30/2000

ABSTRACT: The primary goal of the Community Assessment of Needs and Health Systems Performance for Children with Special Health Care Needs Project (the "Project") is to promote access to high quality primary, specialty and rehabilitative services for children with special health care needs (CSHCN) in a rapidly changing health care environment by improving the ability of local health jurisdictions to identify needs and barriers and to contribute to planning and policy decisions based on those identified needs and barriers. The Project will develop an indicators-based model for measuring health service needs and health systems performance for medically underserved children with chronic, disabling and/or life-limiting conditions at the local health jurisdiction level. This model will be piloted in two Washington counties--one urban and one rural--to evaluate its effectiveness in meeting its objectives.

The impetus for this Project comes from efforts currently underway in Washington state to develop quality of care indicators for CSHCN (through Department of Health), CSHCN data dissemination efforts by the Office of Children with Special Health Care Needs evolving from the Legislature's Health Care Policy Board CSHCN study, and the rapid pace of changes in welfare reform and medical assistance programs. In addition, under the state's Public Health Improvement Act, local health jurisdictions in Washington are now required to complete community health assessments for use in setting local health priorities. The Project is consistent with the National Health Objectives for the Year 2000 for CSHCN and with priorities established by Washington's Title V Block Grant in the areas of data and assessment, quality assurance and improvement, and monitoring the impact of managed care.

During the three years of the proposed Project, staff will:

1. Identify barriers to CSHCN assessment of needs, system capacity, and systems performance at the county level by (a) monitoring relevant changes in health and welfare reform; (b) evaluating current approaches to community health assessment in Washington state; and (c) developing primary and secondary data sources and developing indicators of health status, risks, services, systems capacity and performance for CSHCN at the county level.
2. Develop a generic model and methodology for improved CSHCN assessment at-the county level by (a) reviewing existing assessment models (such as the MCHB Assessment Model); (b) designing methodologies for handling existing data; (c) designing data collection and recording protocols for obtaining additional information, including encounter data from private health plans used for defining the population of CSHCN in

an area; (d) developing a generic model for CSHCN assessment at the local health jurisdiction level; (e) pilot testing this model in urban (King County) and rural (Kittitas County) settings; and (f) designing appropriate training and technical support programs to enable local health jurisdictions to implement this model. 3. Evaluate the model and facilitate its use in influencing the allocation of public health improvement funds and Medicaid quality assurance/improvement efforts by: (a) evaluating the strengths and weaknesses of the CSHCN assessment model in the two case studies (King and Kittitas counties); (b) developing procedures for integrating the generic model into the annual community health assessment process; (c) identifying health indicators that might be incorporated into HEDIS reporting for CSHCN in MAN Healthy Options contracts; and (d) assisting local health jurisdictions to refine the model inputs and data requirements to meet their own needs and technical abilities.

The Project clearly builds on, and is designed to supplement, efforts already underway in Washington state to enhance the quantitative capabilities of local health jurisdictions in measuring and evaluating the health status of children with special health care needs. It also seeks to develop a population/community-based health assessment model that can be adapted to the needs and technical capabilities of public health departments across the state. Through the Project's public-private collaboration (involving Children's Hospital and Medical Center, the Washington State Department of Health, the University of Washington, two county health departments, and two private health plans), it seeks to facilitate partnerships in developing appropriate health service data for calibrating the model.

**TRANSPORTABLE MATERNAL AND CHILD HEALTH
INFORMATION INTERNET QUERY MODULE: MatchIIM**

Organization: Utah Department of Health, Division of Community and
Family Health Services

Address: 288 North 1460 West, Box 144420
Salt Lake City, Utah 84114-4420

Principal Investigator: George Delavan, M.D.

Phone: 801-538-6901

Years: Two

From: 10/1/97 - 9/30/99

ABSTRACT

The Utah Department of Health (UDOH) is applying for a two-year grant of \$120,194 to create a Maternal and Child Health Information Internet Query Module MatchIM). The MatchIM will enhance the existing UDOH Internet health

data query system. Both the current Internet system and the new MatCHIM module will offer transportable applications for other states to adapt. The MatCHIM can have nationwide impact on enhancing Maternal and Child Health (MCH) information infrastructure and improving MCH assessment, surveillance and planning capabilities at the local/community and state levels.

The MatCHIM system consist of two sub-modules. The First submodule will produce on-line MCH indicators/measures based on each single data source. The second sub-module will generate on-line MCH statistics from a linked data source.

The MatCHIM will be built upon World Wide Web technology and Common Gateway Interface (CGI) programming with the SAS software as the data engine. It will be installed at a UNIX platform. The first MatCHIM will be built upon the UDOH's available public-used health databases, using existing hardware, software and in-house computer programming experts. However, it can be simplified for selected data source(s) or measures if a Title V agency wants to partially adapt it. Also, this project intends to modify the MatCHIM software to fit different computing environments.

This project has two concrete outcome objectives:

OUTCOME OBJECTIVE #1: Create an transportable Maternal and Child Health Information Internet Query Module (MatCHIM) by the end of the first Fiscal Year (September 30, 1998).

OUTCOME OBJECTIVE #2: Three or more Title V state agencies will adapt the MatCHIM by the end of the second Fiscal Year (September 30, 1999).

The UDOH applicant also sets up specific partnership and technical performance measures to assure the success of the proposed project:

PARTNERSHIP PERFORMANCE MEASURE:

For Objective #1:

P1.1 All stakeholders participate in defining a set of specific MCH measures for MatCHIM by October 31, 1997.

P1.2 Utah MatCHIM data owners agree to certain procedures of data sharing and on-going management for MatCHIM by November 30, 1997.

P1.3 The MatCHIM Committee develop and set in place policies and procedures for protecting confidentiality in the MatCHIM system by January 31, 1998.

For Objective #2:

P2.1 The project staff and consultant will promote this new Internet data system throughout the entire project period.

P2.2 The project staff will demonstrate the MatCHIM at national conferences once a year to solicit inputs and advertize the product.

TECHNICAL PERFORMANCE MEASURE:

For Objective #1:

T1.1 By January 15, 1998, the MatCHIM Committee will select a set of MCH program-specific, practical, comprehensive and well-defined MCH measures.

T1.2 By February, 1998, the project staff will create uniform data sets and establish data linkages among four major health data systems (births, deaths,

hospital discharges, Medicaid eligibilities) to develop the MatCHIM's linked sub-module.

T1.3 By September 30, 1998, the development of the first Maternal and Child Health Information Internet Query Module (MatCHIM) will be completed.

T1.4 By December 31, 1998, two technical documents will be available to make this Internet query system easy to use and adaptable to other states' information system environments.

For Objective #2:

T2.1 The MatCHIM will be thoroughly tested prior to release to the public.

T2.2 An external evaluator will be hired to independently evaluate the transportability of the MatCHIM.

T2.3 By March, 1999, the project staff will have modified the first Utah-based system for at least two other types of system environments in order for other states to adapt the MatCHIM, if requests are received.

For examples of the current UDOH Internet health query system please surf following home pages: Utah Hospital Discharge Query System:

<http://hlunix.hl.state.ut.us/hda/>; Utah Birth and Infant Death Data System:

<http://hlunix.hl.state.ut.us/hda/birth/>; Utah Mortality Data System:

<http://hlunix.hl.state.ut.us/hda/mortality> USERNAME:TEST1, PASSWORD: TEST1; Utah Population Projections: [http://hlunix.hl.state.ut.us/hda /population](http://hlunix.hl.state.ut.us/hda/population).

MOBILE COUNTY HEALTH DEPARTMENT SPRANS (DUE) Prenatal Abstract Database

PROJECT ABSTRACT

PROJECT TITLE: Prenatal Abstract Database

ORGANIZATION NAME: Mobile County Health Department

ADDRESS: P.O. Box 2867
Mobile, AL 36652

PHONE: (334) 690-8115

PROJECT DIRECTOR: C. Michael Trainor, M.P.A.

FROM: 10/1/95 - 9/30/98

PROBLEM: Infant mortality is a significant problem in Mobile County, Alabama. The county's rates are higher than mortality rates for Alabama and the nation. Congenital malformations remain the leading cause of infant death and child death to age fourteen in this region. The financial effects of birth defects to our society are staggering.

GOALS AND OBJECTIVES: The goals of the project are to lower infant mortality and morbidity through prevention or correction of birth defects, develop a data system that increases the accuracy of birth certificates by abstracting prenatal records at the source, and to export the enhanced data collection system to other delivery and prenatal care sites. The first year objectives were to design a prenatal abstract database, develop the supporting systems, training personnel, seek experience from others, and implement integration. The second year objectives were to complete the linkage with the University of South Alabama Medical Center, market the system to local CHCs and the state health department, and to encourage private delivering hospitals to join in the birth defects monitoring efforts.

METHODOLOGY: The Mobile County Health Department (MCHD) and its partner, the University of South Alabama Department of Medical Genetics (USADMG) will seek to make the prenatal abstract database (known as the Antepartum Patient Record System) operational and linked to the University of South Alabama. MCHD and USADMG will seek to expand the use of APRS to two local CHCs and the Alabama Department of Public Health.

COORDINATION: MCHD and USADMG are coordinating their activities with the Alabama Department of Public Health. The State Health Officer has been briefed on this project and other birth defects monitoring and prevention efforts by the Project Team.

EVALUATION: Evaluation of the project in year one and two is related primarily to process. A system of regular reports to the County Health Officer and Chairman of USADMG serve as the project management tool. Reports from the USADMG computer analyst are used to monitor contract performance. An audit indicates that the data transcription error is low.

EXPERIENCE TO DATE: A contract was entered into with the University of South Alabama Department of Medical Genetics (USADMG), MCHD partner in this venture, to design a stand-alone PC application using a commonly available database engine. The Alabama Department of Public Health Antepartum Record and Worksheet was used as the basis for design because of its widespread use. USADMG completed the prototype of the Antepartum Patient Records System (APRS). MCHD and USADMG have field-tested APRS which is currently in Release 3.1. MCHD personnel were trained on APRS and the University's Mobile Community Health Information Network (MCHIN). MCHD gained a year of experience with APRS. MCHIN replaced the magnetic medium originally considered for conveyance of the data. The University's decision to move Labor and Delivery has delayed the link to the hospital. MCHD and USADMG worked with the Alabama Department of Public Health to test integration with the state's Electronic Birth Certificate (EBC). The test proved successful and potential for seamless data transfer to the ADPH Center for Vital Statistics is possible.

DATA UTILIZATION AND ENHANCEMENT

SPECIAL SUPPORT
FOR
IMPLEMENTATION OF INITIATIVES

Project Title: Healthy Start System Development Project

Organization Name: Department of Community and Family Health, College of Public Health,
University of South Florida

Address:

13201 Bruce B. Downs Blvd, MDC 56
Tampa, FL 33612-3805

Project Director: Randall J. Remmel, Ph.D. **Phone:** (813)974-6739

Years: 3 years **From:** 10/01/96 to 9/30/99

PROPOSAL ABSTRACT

PROJECT DESCRIPTION: The Healthy Start System Development Program (HSSDP), at the University of South Florida, assists state agency programs for maternal and child health by providing comprehensive locally relevant data. HSSDP has been responsible for enhancing the analytic capability and information infrastructure of the Healthy Start Coalitions throughout the state of Florida. Through the collection of vital statistics, prenatal screening, and hospital discharge data, a system has been developed to provide locally relevant data sets and training in the use of this data, to the Coalitions.

The HSSDP seeks to expand and supplement these existing activities to enhance the use of information technologies in the development of information and model data systems that can be used to collect, manage, and analyze data at the community level. This enhanced data will be used by the coalitions and County Public Health Units to facilitate needs assessments, program planning and implementation, monitoring, and evaluation of the health status of mothers and children. The expanded efforts will allow Coalitions and CPHUs to conduct comprehensive analysis of their local data in a more independent manner. Additionally, these enhanced efforts will foster and strengthen the continuing collaboration between the State Health Office and local public health agencies, academic institution, and the private sector.

GOALS AND OBJECTIVES: The HSSDP seeks to develop a model system to enhance the use of data and technology which will facilitate the development of policies, programs, and services that can improve the health of pregnant women and infants. Project objectives are: 1) to continue to distribute data sets, adding client service data as well as WIC program and Medicaid information, 2) to increase the computer technology capabilities of the Healthy Start Coalitions, 3) to improve the quality of policy generated from the State of Florida through the dissemination of accurate and comprehensive data, 4) to develop a model program of data utilization and enhancement for dissemination and replication to other states, 5) to establish a national conference to discuss issues related to data utilization, confidentiality and ethics.

METHODS: Through a series of five regional training workshops each year, the HSSDP will train Coalition and CP~U representatives on the use of Epi-Info, statistical analyses, qualitative data methods, and program evaluation. Additionally, HSSDP will assist the Coalitions and CPHUs in establishing Internet connections and reaming how to send and receive electronic information. HSSDP will provide technical and consultative assistance and will serve as a training site for masters and Ph.D. students to gain expertise in providing technical assistance. A clearinghouse of educational materials used in the workshops and computer technology will be available to interested organizations. A workshop will be established with a national conference to discuss issues related to the use of data in the creation of public health policy, confidentiality of data, and ethics in data utilization.

EVALUATION: The project will be evaluated by an external evaluator using the consumer oriented approach. Using the criteria of evidence of achievement of primary and secondary objectives through: follow-up results; unintended effects; range of utility; moral considerations; and costs.

ANNOTATION: The Healthy Start System Development Project seeks to develop a model system to enhance the use of data and technology which facilitate the development of policies, programs, and services that will improve the health of pregnant women and infants.

KEYWORDS: Data Analysis, Information Management, Community Development, Capacity Building, Data Dissemination, Data-Based Decision Making, Training

DATA UTILIZATION ENHANCEMENT
AND
SPECIAL SUPPORT
FOR IMPLEMENTATION OF INITIATIVES

ABSTRACT

Project Title: CHILDHOOD DISABILITY: ASSESSING EQUITY OF DIFFERENT DEFINITIONS

Project Director: Ruth E.K. Stein, M.D.

Phone: (718) 918-5304

Years: 1996-1998

From: 10/1/96 to 9/30/98

Organization Name:

Albert Einstein College of Medicine
Department of Pediatrics
1300 Morris Park Avenue,
Jacobi Medical Center, Room 817
Bronx, New York 10461

PROJECT DESCRIPTION: This application seeks funding for a new project to assess the equity of a number of definitional models for identifying children with special health care needs and disability. These will form the basis for development of a definitional model for later use in policy related analyses of the Children's Disability Supplement to the National Health Interview Survey (NHIS) that will have direct bearing on the federal, state, and local MCH policy for children with chronic conditions.

METHOD: We will accomplish this work on definitional models by: 1) examining the policy implications of using five different operational definitions and their definitional components to identify children who have a wide range of chronic conditions and disabilities; and by 2) examining the issue of equity and bias in the application of each definition and its components by determining whether the definitions: a) identify equivalent proportions of children; b) identify the same or different groups of children; c) are equally likely to identify children across a full range of sociodemographic variables including: (1) household income, (2) household composition, (3) maternal education, (4) race/ethnicity, (5) geographic location of residence

(urban, suburban, rural), (6) insurance status; d) are equally likely to identify children across a full range of condition-related characteristics including: (1) diagnostic grouping, (2) age of onset, (3) perceived health status, (4) utilization of health care; (5) are equally likely to identify children across the full age spectrum.

This project will lay the groundwork for a series of key policy analyses to be conducted at a future date on a rich new national dataset that includes the Children's Disability Supplement and concurrent NHIS surveys (the NHIS Core interview and Family Resources Supplement). All such analyses require use of an operational definition of childhood disability. It is important to understand the implications of different definitional approaches from the perspective of equity in order to be sure that the major analytic variable in future analyses is not biased toward or against a particular subgroup of vulnerable children. The testing and understanding of implications of definitions are critical steps that will provide the model for much of the later information to be derived from this new data set. The results of our analyses of the different definitions will inform the choice for later work. Thus, the model we develop will have major implications for subsequent substantive analyses and issues related to the financing and delivery of services to vulnerable children through national, state, and local MCH programs for many years to come.

The proposed project will build on the work already undertaken by this team in three previous projects: 1) the National Child Health Assessment Planning Project (NCHAPP: MCJ-117007), funded by MCHB; 2) the Data Project to Assist States' Children with Special Health Care Needs (CSHCN) Programs in Needs Assessment (State Data Project: MCJ-36D401), also funded by MCB ; and 3) the Assessment of the Policy Implications of Alternative Functional Definitions of Disability in Children (Office of the Assistant Secretary for Planning and Evaluation (ASPE: 94ASPE261A).

We will test five different operational noncategorical definitions of disability and their components in order to assess how equitable or biased they may be with respect to identifying children of differing sociodemographic backgrounds, with differing condition-related characteristics, and of various ages. The five operational definitions include the one used by NCHS and the ones developed by NCHAPP, MC B and New England SERVE as well as a variant on the NCHS version. All are based on the ADA's definitional framework, but represent different ways of implementing the ADA's conceptual definition using the Children's Disability Supplement data sets. At the end of this project there should be considerable comfort in the model developed based on these analyses and in recommending a major definitional strategy for the much needed policy analyses of the Children's Disability Supplement.

The first step will be to assess the implications of different operational definitions of childhood disability by looking at the nature of the populations identified by five different operationalizations of the conceptual framework. The second step involves specifically assessing issues of equity and bias in the definition analyses outlined by NCHAPP's NAC. To do this we will examine whether the same children are likely to be included or excluded by any definition or by any component within a particular definition. We will determine if any systematic differences in identifying of children by these definitions relate to sociodemographic characteristics of the children or their families, to characteristics of their disabling conditions, or to child age. By analyzing prevalence rates, sociodemographic and condition-related characteristics, and age using the five operational definitions of disability and their components, we will provide a comprehensive and concrete description of who is captured by each definition

and how these approaches differ.

MATERNAL AND CHILD HEALTH IMPROVEMENT PROJECTS ABSTRACT

Project Title: MCH-INFO Analytical Software Tool for Needs Assessment

Organization Name: University of Illinois at Chicago
Division of Specialized Care for Children
1919 W. Taylor Ave., 8th Floor (M/C 618)
Chicago, Illinois 60612-7255

Project Director: Colleen A. Monahan, DC, MPH

Telephone: 312.996.1360 Fax: 312.413.0367

Project Period: 3 years **From:** 10/01/95 to 9/30/98

PROBLEM: State maternal and child health and children with special health care needs (MCH/CSHCN) programs report summary data for assessments required in annual Title V Block Grant applications and annual reports. State programs initiate needs assessments to evaluate current programs; identify areas of service needs; and assist in appropriating funds in a methodical, fiscally responsible manner. Reporting and analyzing summary data require skills that can overwhelm MCH/CSHCN program staff with limited resources.

GOALS AND OBJECTIVES: The goal is to adapt an existing MCH information system and software program-MCH-INFO-to empower state MCH/CSHCN programs and their supporting entities by enhancing their use of data and analytic methods for local problem-solving.

OBJECTIVE #1: Modify MCH-INFO to address programming issues and correct flaws identified through testing by users.
#2: Develop a programmer's manual for MCH-INFO.
#3: Develop a training workbook for MCH-INFO users.

METHODOLOGY: MCH-INFO is being tested at three state MCH/CSHCN program sites: Minnesota, Connecticut, and Illinois. Communication with these sites will continue over the next year, providing feedback that will help identify problems with the software and manual. The project's Web site will generate feedback regarding the software and manual. Comments from the class that will be testing the training workbook will be reviewed, as will suggestions and comments from other interested programs.

COORDINATION: This project has collaborated with ACCESS/MCH, a national center that funded the technical assistance provided to the MCH-INFO test site in Connecticut. The project also collaborated with staff of MCHB-funded DEAL/MCH to develop examples and exercises for the training workbook. The MCH-INFO project is also collaborating with the MCHB-funded MCH-NetLink project at the Institute for Child Health Policy at the University of Florida. MCH-NetLink houses and supports the MCH-INFO World Wide Web site.

EVALUATION: The project director will monitor project objectives and activities through compliance with project timelines. Project staff will monitor the success of modifications to MCH-INFO by maintaining regular communication with users at test sites and at state and local sites to address problems with the software and documentation. Project staff will incorporate feedback obtained through the newly implemented system of user registration into modifications of the software and manuals.

EXPERIENCE TO DATE: MCH-INFO software has undergone significant revisions in response to user feedback and a Version 2.0 was released in April 1996. Testing of the software has continued at: the Connecticut state health department Title V program; the Minnesota state CSHCN program and the state Center for Health Statistics, and the Illinois state MCH program. A programmer's manual will be completed by the end of the first fiscal year of the grant. A user's manual was completed and disseminated to the all state MCH program directors. A process to register users of MCH-Info was developed. An MCH-INFO WWW site was created and is housed and supported by the MCHB-funded MCH NetLink project. The software and the user's manual can be down-loaded from the Web site, significantly increasing no-cost access to this project's products. MCH-INFO project staff have been collaborating with DEAL/MCH staff in creating examples and exercises for the training workbook.

ANNOTATION: MCH-INFO is a software program for the presentation and analysis of public health data with an emphasis on maternal and child health(MCH)and children with special health care needs (CSHCN)planning and reporting. MCH-INFO is a program for data entry, and reviewing, analyzing, reporting, graphing, and mapping key MCH indicators. The program is intended to provide a state or local MCH/CSHCN programs and community-based health agencies with a tool to assist in needs assessment and planning.

KEY WORDS: Software, needs assessment, database, data, children with special health care needs, datasets, Internet, World Wide Web.

DATA UTILIZATION AND ENHANCEMENT ABSTRACT

Name: Dr. David M. Paige, M.D., M.P.H.

Organization: Department MCH, Johns Hopkins University School of Hygiene and Public Health
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Baltimore, MD 21205

Phone: (410) 955-3804 **FAX:** (410) 955-2303

Project Period: 10/1/95 - 9/30/98

PROBLEM: Data collection, analysis and presentation are the fundamental tools for identifying community health problems and needs, and in designing and evaluating the effectiveness of interventions. Data plays a critical role in setting the framework for public and private sector accountability for appropriate, effective, and efficient service delivery, and for monitoring progress towards national health objectives. As the nation moves forward in health care reform, the need throughout the MCH community to monitor and assess the impact of change on the population becomes even more critical. The project is designed to assist the state and local communities in Maryland adapt and integrate new and currently operational MCH data and information systems. The project is expanding and enhancing state and local capacity for collecting, integrating and analyzing data to improve MCH, while creating a "new" system of linked data, information and analytic processes by utilizing and expanding the effective elements of data systems already in place.

GOALS AND OBJECTIVES: The overall goal, to affect MCH program and policy development by adapting and integrating currently operational MCH data and information systems, while building in new components to improve data collection, analysis, and dissemination, is being achieved by: implementing the DU&E project; performing an ongoing MCH needs assessment at the local and state levels; documenting existing state and local data systems and assessing current approaches to collecting, maintaining, analyzing, reporting and disseminating MCH data; developing collaborative relationships among the MCHB, the Johns Hopkins University, and state and local health departments; facilitating participation in system enhancements by system users, and providing them technical assistance;; developing a regional network of training programs; informing health policy decisions and planning in Maryland; and assessing project impact and its readiness for National implementation.

METHODOLOGY: The expanded and enhanced information system is including elements of systems currently in place or being tested, utilizing newly designed elements as necessary to expand data collection and analysis, closing gaps in existing systems and upgrading data sources as appropriate. The information obtained is available to address needs assessments, policy and program development, evaluation, resource allocation, monitoring, quality assurance, accountability and resource justification and coordination. The expanded and enhanced system will assure that all data are available in a useful format at all state and local levels and potentially on the federal level. The project is monitoring and assessing the progress made in reaching the Healthy People 2000 Objectives and is developing methods to establish priorities based on the data indicators of rate magnitude and trends based on comparison to the US rates or Healthy People 2000.

COORDINATION: This project is building upon established linkages with: State and community partnerships; other MCH training programs; relevant regional and national programs; other schools of Public Health; appropriate MCH funded training programs; and relevant non-profit foundations and organizations. Specifically, these linkages include: Maryland Department of Health and Mental Hygiene; local health agencies (including Maryland Association of County Health Officers); Title V agencies; the MCH Science Consortium; the Center for Adolescent Health Promotion; the Child and Adolescent Health Policy Center; The Adolescent Program at the University of Maryland; The Kennedy-Krieger Institute; Baltimore Community Foundation; Robert Wood Johnson Foundation; the Charles Crane Family Foundation; and the faculty of the Department of Maternal and Child Health at the Johns Hopkins University.

EVALUATION: Process evaluation includes assessment of implementation, measuring fit between plan and reality, and assessment of the project's progress towards meeting its goals. This evaluation has allowed for modifications and mid-course corrections, for example, integrating the goals, objectives and needs of MACHO into the project's needs assessment. Outcome evaluation will determine whether or not the objectives have been obtained, and if results and project activities will have a lasting effect on the data systems and users in Maryland. Generally, evaluation of outcomes will take one of four different forms: 1. local system utility; 2. translation of local system to State and National levels; 3. individual project impact; 4. training program impact.

EXPERIENCE TO DATE: Meeting or exceeding objective milestones, the DU&E project organic, staff, and interdisciplinary and interagency management are in place and operating smoothly. Appropriate faculty appointments have been made, an Advisory Committee is participating fully, and systematic information exchange is being facilitated. An ongoing MCH needs assessment at the local and State levels is being expanded and existing State and local data systems are being documented. Collaborative relationships among appropriate organizations, institutions and programs have been developed and expanded and participation in system enhancements by system users is being facilitated through technical assistance, training programs, and electronic media. Through this project, health policy decisions and planning in Maryland are being guided and the impact of this effort on state and local health agencies and its readiness for national implementation is being evaluated.

TEXT OF ANNOTATION: This project is developing a model information system to improve state and local efforts in collecting, analyzing, and reporting data for MCH program and policy development, and local problem solving. This is being achieved by: implementing the Data Utilization and Enhancement project; performing an ongoing MCH needs assessment at the local and state levels; documenting existing state and local data systems, and assessing current approaches to data collection, maintenance, analysis, reporting and disseminating; developing and expanding collaborative relationships among appropriate organizations; facilitating participation in system enhancements by system users, through technical assistance, training and electronic media; informing health policy decisions and planning in Maryland; and assessing the impact of this effort on the state and local health agencies and its readiness for National implementation.

KEY WORDS: Collaboration, Data, Dissemination, Enhancement, Training, Utilization.

PROPOSAL ABSTRACT: Data Utilization and Enhancement of Data
Systems for Maternal Child Health Programs

Project Title: Monroe County Health Department DUE Project

Organization Name: Monroe County Health Department

Project Director: Karin Duncan, Phone: (716-274-6192)

YEAR 1: October 1, 1996-September 30, 1997

Years of Project: Three

Address: 111 Westfall Road, Caller 632
Rochester, NY 14692

PROBLEM: This proposal addresses the lack of an integrated data system at the local health department level to adequately support the ongoing monitoring of health status, and the planning, evaluation of health services for the maternal child health population. Lack of such a system compromises the local health department's ability to determine effectiveness of services delivered and to adequately determine if services are being delivered to those most in need. Quality data and data management capabilities for maternal child health services need to be a core of the infrastructure of local health departments to address emerging and on-going public health issues. The Monroe County Health Department (MCHD) is partnering with the New York State Department of Health (NYSDOH) in two major reform activities directed at improving the way services are provided to maternal child health populations in Monroe County: A) Implementation of an integrated service delivery model and B) Financing reform through a block grant to MCHD. Currently, NYSDOH provides funds through seven different categorical grants to MCHD. This funding method fosters a categorical service delivery model. In addition, the administrative burden of managing seven different grants unduly stresses administrative staff both at the local and state health department levels. Each of the primary categorical areas maintains a separate data information base on families accessing services. Problems with the current system include: some information systems are networked to other data sets outside the MCH area, but not within; most of the data programs are on free standing personal computers (PCS) with no interface capability; programs have limited capability of electronically transmitting data to NYSDOH for reporting purposes; some data programs require entering data at the local level, but local staff are unable to retrieve the data. The data systems for many service areas have either been created by the NYSDOH or by program staff at the local level. Because the databases are on different software programs, the ability to interface or integrate data for monitoring or evaluation purposes does not exist. In addition to the difficulties in managing the data, much of the information that is kept is primarily process and service utilization information. As part of the reform objectives for the MCHD, health status outcome indicators will be tracked as reporting requirements for the NYSDOH. To measure the reforms that have been identified by the MCHD and NYSDOH, the development of an integrated data information system is critical.

GOALS AND OBJECTIVES: The goals and objectives for this project are: Goal 1) Conduct a comprehensive systems analysis that will translate the service needs into a document detailing the information and system enhancements to support an integrated delivery, monitoring, and evaluation model for maternal child health services. Objectives: A) To document current information management capabilities and elements, including processes for data collection/entry methodologies, quality control, input/output features. B) To identify data information requirements of strategies for an integrated service delivery reform: single point of access, central registry, common assessment tool, health status outcome reporting. Goal 2) Develop a data information systems integration plan that utilizes existing databases and identifies strategies for the collection of newly identified information needs. Objectives: A) To identify data structure; B) To identify input/output sources and products; C) To identify protocols for data collection/entry, quality maintenance, coding, data dictionaries; D) To identify software base and hardware needs. Goal 3) Develop a prototype consolidated MCH information system to demonstrate the feasibility and proof-of-concept of the integrated information system; Objectives: A) To demonstrate linkage capabilities; B) To provide access to systems for end-user using NYSDOH Health Information Network (HIN) connections.

METHODOLOGY: This project will be accomplished with the ongoing guidance of the Partnership workgroup (NYSDOH and MCHD program/administrators). The success of the integrated information system is important to both the MCHD and the NYSDOH. The MCHD will contract for the systems analysis and development of a prototype. Currently, the MCHD contracts for consultation and technical assistance in development of evaluation designs and data management plans for several of the maternal child health service areas. This contractor is expected to be able to assume and adequately conduct the additional workplan. The MCH administrator will be responsible for the data enhancement project. A full-time data manager will be recruited and hired to be responsible for the operational, internal aspects of this project. An oversight group with membership from the NYSDOH (HIN and liaison from Family Health Division), MCHD information systems support liaison, MCH administrator, Data Manager, and the consultant will be responsible for regularly scheduled progress reviews. The project timeline will outline when deliverables are expected. Methods to conduct the systems analysis and prototype will include on site consultation and analysis work: interviewing key staff at the NYSDOR and MCHD to review work that has been done on the integrated delivery strategies; regularly submitted progress reports from consultants; participation in the Partnership workgroup when appropriate. Communication with the Partnership group is key to assuring that the information needs of the NYSDOH and MCHD are both accomplished with this project.

EVALUATION: The Partnership has developed a proposed evaluation of the reform efforts that are being undertaken by the MCHD. As discussed, the development of an integrated data information system is key to measuring the success of the reform efforts, particularly in terms of the integrated service delivery model and health status outcomes. The evaluation concepts include documentation of before and after time/quantity studies demonstrating administrative burden; documentation of increased flexibility of resource allocation; documentation of improved accountability measures (health status outcomes); and documentation of increased accessibility, integration and comprehensiveness of services from the organizational, frontline (staff) practice and consumer perspective. Elements in the evaluation planned for the reform efforts can be utilized in the specific evaluation of the DUE proposal. In addition, adherence to timeliness, deliverables, ability to make adjustments as necessary will be monitored in the regularly scheduled oversight meetings.

TEXT OF ANNOTATION: This project proposes the development of an integrated data information system and management plan for the ongoing tracking, monitoring, planning and evaluation of maternal child health services in a local health department. The data information/management plan is key to reforming the way services are currently delivered and financed in the health department. The expected reforms are an integrated service delivery that includes single point of access, central registry, common assessment tool one report on health status outcomes of clients served. Financial reforms include flexibility through block grant funding vs. categorical funding.

Key words: Integrated model; data information system; health status outcomes.

PROPOSAL ABSTRACT

Project Title: Birth Record Enhancements of the New York State
Medicaid Managed Care Encounter System

Organization Name: NYS Department of Health

Address: Outcomes Research Unit
Room 1938, Corning Tower, ESP
Albany, New York 12237

Principal Investigator: Patrick J. Roohan

Telephone: (518) 486-9012

Years: Two

From: 10/1/96 - 9/30/98

This Data Utilization and Enhancement project builds the information system infrastructure to incorporate birth record data and prenatal and birth outcome reports into the New York State Medicaid Encounter Data System (MEDS). MEDS information will be used to monitor and assess the effects of the implementation of the State's mandatory Medicaid Managed Care (MMC) program on Maternal and Child Health program (MCH) goals and objectives.

Specific objectives of the project include:

1. Incorporating linked Vital Statistic (VS) birth certificate and detailed newborn and delivery inpatient discharge records into the MEDS.
2. Demonstrating an efficient and effective data warehousing solution for MCH information needs.
3. Providing Department researchers with files of a) linked mother/infant inpatient discharge records and b) linked Vital Statistic birth certificate - mother/infant inpatient discharge for all births statewide for all payers.
4. Improving the timeliness of birth outcome and performance indicator information for MMC program monitoring.
5. Developing Internet accessible, effective MMC program management and monitoring reports related to birth outcomes.

MEDS is composed of a minimum uniform data set of: 1) all inpatient, outpatient program, physician, pharmacy, and durable medical equipment encounters by Medicaid recipients enrolled in managed care plans; and 2) recipient characteristics and enrollment history from Medicaid

eligibility data sets. To enhance and supplement the value of this minimum data set, the NYS Department of Health (DOH) is merging MEDS with other administrative data sets which will permit more detailed evaluation of the quality of and access to health care within the State's Medicaid managed care program. B-y linking to birth certificate and detailed inpatient discharge records, MEDS is enhanced by including outcomes such as birth weight, infant mortality, and maternal mortality, as well as risk factors such as parity, plurality, previous fetal loss, complications and comorbidities, maternal education, delivery procedures, race, and ethnicity. In addition, by adding birth certificate and inpatient discharge information on all NYS births, MEDS will contain a source of readily available comparative information on births and deliveries for all payers, including Medicaid fee-for-service and commercial managed care plans.

The MEDS/MCH data enhancement project approach involves an intra-agency collaborative effort between the DOH Center for Community Health (CCH), Office of Managed Care (OMC), and the Information Systems and Health Statistics Group (ISHSG). Project programmatic expertise and guidance will be provided by CCH through a MEDS/MCH Work Group; project management, data linkage, report production and analytic expertise by OMC; and data base development and production by ISHSG.

MEDS and the MEDS/MCH data enhancement projects take advantage of the latest data warehousing solutions to efficiently store and access large data bases. This approach involves defining a relational data structure for the data elements and indexing the data tables for accelerated data loading and retrieval. This is a necessary design requirement since MEDS is projected as needing to handle up to 80 million records per year with the capacity of performing longitudinal analysis over periods of three or more years. Data is being stored on a dedicated and scalable platform.

The project is taking place over a two-year period. In Year One, research questions, relevant data elements, and the data base structure will be defined; system development, data linkage, and testing will occur; data loading production schedules will be established; report formats will be developed and loading of reports to the DOH Internet Website and evaluation of the frequency of report access and satisfaction with report content will commence. In Year Two, system testing and data linkage assessment will continue, data analysis and risk adjustment strategies will be pursued, evaluation of the frequency of report access and satisfaction with report content will continue, and analysis of trends in birth outcomes in managed care programs will commence.

Project Title: The *FIRSTLink* Data Utilization and Enhancement Initiative
Organization Name: Massachusetts Department of Public Health
Address: 250 Washington Street, Boston MA 02108
Principal Investigators: Janet Leigh (617) 624-6015 and Saul Franklin (617) 624-5512
Project Period: 3 Years From: 10/01/96 to 09/30/99

Background and Need~ This proposal seeks support for the continued implementation and expansion of a system called *FIRSTLink*, which:

- a. provides universal screening and prospective identification of at-risk newborns and families using electronically transmitted birth certificate data "meeting the Child Find intent of Part H of P.L.99-457);
- b. links these at-risk infants and families to community-based services designed to minimize developmental delay and adverse health outcomes;
- c. follows up and tracks the health status of these children over time through an integrated child health data system with *FIRSTLink* at its core.

Individual birth certificate data, transmitted electronically each night from the Vital Statistics registry to the *FIRSTLink* computer, are screened for selected medical and sociodemographic characteristics associated with an increased incidence of poor child health and development. Identified infants are then referred via on-line data transmission to designated providers in the communities in which they live. These providers contact the parents and offer a home visit, through which a family needs assessment is completed and basic information on health, parenting, and community resources is given. The home visitor assures that the family is linked to a primary health care provider, and assists with referrals to other services as needed. Information on the outcome of the family contact and home visit is returned on-line to MDPH to allow tracking and monitoring of health outcomes over time. A system flow diagram is included in Appendix xx, along with a list of the risk criteria; printouts of computer screens from the data system are found in Appendix xy. The system is truly universal; births from those few maternity hospitals without electronic transmission are entered into the electronic system by Registry of Vital Records staff.

Goals and Objectives~ The ultimate vision for *FIRSTLink* will be as the core of an integrated child health information system. Coupled with an array of other data system development initiatives of the Massachusetts Department of Public Health (MDPH) such as major computer billing and registration enhancements for EI, WIC's automated system, our Massachusetts Immunization Information System, our Pregnancy and Parenting Support Programs database, an integrated system will allow us to track children across programs and over time. As a result we will learn more about numbers of children served by participant programs, service delivery networks, interprogram referral patterns and correlates of utilization by children and families. Simply moving children into systems of care earlier could impact thousands of at-risk children across the state (there are over 18,000 projected EI-eligible children alone).

This project is replicable and of potential benefit to many states; most have or are implementing electronic transfer of birth certificate data from maternity hospitals to their health departments, others are acting to improve birth outcome surveillance and still others are involved in immunization information system development. The integrated child health data system that will develop in Massachusetts will provide a model for other states. We have already received inquiries from other states about *FIRSTLink* and are prepared to demonstrate the data transmission component on request.

Approach~ The system is currently being piloted in areas of three major cities; three more will be added during Year~One. The first year will be spent maintaining and expanding the pilot system demonstration, moving the system onto its own server, supporting birth certificate data quality monitoring, planning the broader child health data system integration, and evaluating the pilot at the end of Year One. Our evaluation will characterize *FIRSTLink* infants and families by sociodemographics to insure effective program targeting; examine the distribution of risks among *FIRSTLink* infants and families to assure that no classes of risk are systematically excluded; measure the effectiveness of the program by comparing time of program entry prior to *FIRSTLink* with time of program entry of *FIRSTLink* referrals.

In years two and three we intend to continue to maintain the demonstration sites, continue the birth data quality monitoring, enhance the data system by adding more on-line HELP hypertext, and add the capacity for sites to generate automated reports, formulate a child health data integration plan and begin its implementation with the PPSP and EI data sets. Data integration will not require merged data sets across programs; we will maintain the data set linkage information in a cross-reference file to allow us to follow a child from one program to another. We will report on the linkage process and continue it in Year 3. During Year 3 we also plan to extend the referral process to selected EI sites, transmitting to them the data on infants whose risk profile suggests that they could be eligible for EI. This will allow EI programs to assess and register newborns faster than through conventional referral mechanisms. We will replicate and update the Year One evaluation during Year 3. By the end of Year 3 we will have an action plan for statewide implementation of *FIRSTLink* and for the integrated child health information system of which *FIRSTLink* will be the hub.

PROPOSAL ABSTRACT

Project Title: Monitoring Child Health in Medicaid Primary Care Case Management Systems in the State of Alabama

Organization Name: University of Alabama at Birmingham, Department of Maternal and Child Health, School of Public Health

Address: 1825 University Boulevard, Suite 112, Birmingham, AL 35294

Project Directors: Donna J. Petersen, ScD, MHS and Mary Ann B. Pass, MD, MPH

Phone: 205/934-7161

Years: 1996- 1999

From: October 1, 1996 - September 30, 1999

Project Purpose: The overall purpose of this project is to improve the health of children in Alabama by developing and institutionalizing a system for monitoring a set of essential indicators of child health, including those addressing health status as well as health care access and quality at both the population and health care delivery structure levels. A project team composed of four faculty of the UAB School of Public Health will work with a steering committee comprised of representatives of the state Title V programs, the state Medicaid agency, the state chapter of the Academy of Pediatrics and the Children's Hospital of Alabama, to select those indicators believed to be sensitive enough to detect any effects, positive or negative, of the movement of pediatric Medicaid populations from traditional fee-for-service reimbursed health care to a Primary Care Case Management model. One-third of state Medicaid programs are using a PCCM model for their Medicaid populations, so this project will not only be extremely helpful to the state of Alabama, but will be applicable to other states as well. The project team and steering committee will then devise a data gathering, collection and analysis strategy to accomplish the goal of monitoring the health of children through this systems change period. Finally, project staff will transfer the system for ongoing administration to the state Title V programs, as appropriate, in the final phase of the project. In this way, a firm foundation for the Title V responsibilities of assessment, monitoring, assurance and accountability will be established within the state programs for MCH and children with special health care needs.

Project Approach: Many other projects, researchers and states have worked to develop indicators of child health. This project will select Tom among them, those indicators believed to be most appropriate to the changes anticipated from the shift to a PCCM model for Alabama's pediatric Medicaid populations. The project team will then identify potential sources of data for these indicators and develop new data reporting strategies for indicators for which no data source can be identified. The monitoring system will be implemented in selected Alabama counties and the data monitored for accuracy, completeness, validity and variations indicating sensitivity to system changes. Modifications will be made as necessary. Following a year of data gathering and analysis experience, plans will be developed to transfer the monitoring system to the state's Title V programs for ongoing administration and leadership in population health monitoring.

Results Expected: This project will provide several benefits:

- ~ provide a model data collection strategy for the monitoring of health status, health care utilization and health care quality for pediatric populations in a PCCM model, for those states choosing this model or hybrids of it.

- ~ contribute to the overall knowledge base on the feasibility and appropriateness of utilizing data bases developed for a traditional fee-for-service model in a managed care system, specifically a Primary Care Case Management model, and of developing new data collection strategies that potentially utilize providers of services, recipients of services and community informers to monitor an emerging health care delivery structure.

- ~ carry out this demonstration project in a state that has a markedly adverse child health status ranking compared to other states, indicating a clear and persistent need; and, has

public and private health system characteristics that are similar to the southeast region and other states, i.e. Idaho, indicating that the lessons and results of this project will be of regional and national significance and potentially transferrable to other states.

~ provide data for the state of Alabama that will enhance its ability to both monitor and improve health status of the population of children as well as monitor and improve those elements of the health care delivery and financing system that contribute to or detract from improvements in child health status.

~ complement and extend the work of several related projects including but not limited to, the Alabama Systems Development Initiative, the development of perinatal and child health standards, the systems development activities of the state's children with special health care needs program, evaluation studies of Medicaid service delivery to pregnant and postpartum women, creation of pediatric provider networks incorporating elements of both public health and non-profit clinical care systems, ongoing Title V needs assessment efforts, and the evolution of a redefined public health role for the state of Alabama in the wake of health care delivery and financing reform.

~ foster and strengthen the continuing collaboration between and among the state Title V programs, both MCH and CSHCN, local public health agencies, the state Medicaid agency, the Children's Hospital of Alabama, the Alabama Academy of Pediatrics and the School of Public Health at the University of Alabama at Birmingham.

Geographic Location: This project will be developed and implemented in the state of Alabama. The products from this project will be of interest to any state choosing a primary care case management approach for children through Medicaid managed care initiatives.

Keywords: child health; indicators; monitoring systems; Medicaid; managed care; Primary Care Case Management; Maternal and Child Health

PROPOSAL ABSTRACT

Project Title: A Geographic Information System to Enhance and Support Maternal and Child Health Data Analysis for Developing Comprehensive Systems of Care

Organization Name: New York State Department of Health

Address: Empire State Plaza
Corning Tower Room 1642
Albany, New York 12237-0006

Project Director: Philip Vernon, Ph.D

Phone: 518-473-1495

Years: Three

From: October 1, 1996 thru October 1, 1999

ABSTRACT: This 3-year project's principal objective is to improve maternal and child health (MCH) and care for children with special health care needs (CSHCN) by developing a comprehensive and easy to use surveillance tool for planning and building coordinated community and family health care systems. The Primary and Preventive Care Geographic Information System (PPCGIS), that is already under development, will be expanded and enhanced so that it can be used by state, local agencies, and providers, specifically for MCH and CSHCN planning, needs assessment, and services targeting. The secondary objective is to improve the quality of and help standardize MCH and CSHCN planning and policy development at the neighborhood and community level throughout NYS. This will be accomplished by developing resource materials and training local health units and agencies in how to better use small area data and GIS techniques for MCH and CSHCN applications.

The PPCGIS is a PC-based network consisting of data access and mapping software installed on an individual's PC that is linked to a data repository maintained by the NYS Department of Health. The repository includes demographic and socio-economic data, health status, and maternal and perinatal health indicators. MCH and other health related services files are also available to compare the indicators with service availability. Grant funds will be used to expand and enhance the PPCGIS so that it can be used for MCH and CSHCN applications. With grant funds, a Project Director will be hired. A steering committee of state and local agencies involved in various aspects of MCH planning and delivery will be formed and staffed to provide overall guidance to this project. An MCH and CSHCN software module will be developed within the PPCGIS. MCH and CSHCN indicators and preprocessed measures, including Healthy People 2000 indicators and baseline measures, and other key perinatal health and MCH indicators, will be added to the data base. User guides, case studies, and training manuals specific to MCH and CSHCN applications will be developed. The system will be pilot tested and modified, and then disseminated across the state to county health departments and other planning agencies and providers involved in MCH and CSHCN planning and service delivery. Regional and on-site training sessions will be held, using a "train the trainer" approach. The NYS Association of County Health Officials will serve as a contractor during year 3 to conduct training of its member organizations and other agencies across the state. Project objectives related to the use of the enhanced GIS will be monitored in an on-going evaluation. The GIS, along with user guides and training manuals, will be modified based on the evaluation and user feedback. By the end of the grant period over 70 programs will be linked to the PPCGIS and trained in how to use it for MCH and CSHCN needs assessment, planning and

Upon completion of this project, planners and analysts across the state will have access to a comprehensive and easy to use surveillance tool to support MCH and CSHCN planning and policy development, and help track progress in meeting national Healthy People 2000 goals and local priorities. This model MCH and CSHCN GIS will include user guides and training manuals. Widespread use of the PPCGIS for needs assessment, planning, and services targeting will lead to more effective and efficient service delivery, and ultimately better health care outcomes over time.

Project Title: Children's Health Network
Organization Name: Hartford Primary Care Consortium
Address: 30 Arbor Street North
Hartford, Connecticut 06106

PROBLEM: Infants and children in Hartford and other urban areas are generally served by several health care facilities. Yet even with access to these institutions, infants and children have above-average rates of morbidity and mortality, particularly in inner cities with impoverished, multi-lingual, multi-cultural, and mobile families. Their health needs are served primarily by several heterogeneous providers within different regional geographic or managed care networks. Continuity and coordination among these providers are often poor. In many encounters, patient and providers are unknown to each other. Lack of concise, readily-available, uniform, person-based information hampers providers' decision-making. Lack of automation and information-sharing among a child's providers limits efforts to assure follow-up care, and to enlist the family in that process. In addition to diminishing the quality of primary care at the family level, absence of uniform, clinical, longitudinal, population-based information impairs local and state officials, researchers, and planners in developing health outcome information and performing needs assessment.

GOALS AND OBJECTIVES: The central goal of the Children's Health Network (CHN) is to improve the quality of primary care by implementing a model region-wide comprehensive, computerized, linked clinical information system. During FY97, the Network will progress in implementing an on-line clinical information system among heterogeneous sites. It will add new sites, and extend and evaluate the use of a uniform data set among several institutions. It will continue and reevaluate formal consent protocols. It will develop a simple patient-held record. It will conduct evaluation activities. It will implement policies for use of aggregate data by outside parties.

METHODOLOGY: Activities include further data base development, system implementation and revision, assessment of security and confidentiality methods, aggregation and reporting of data, and evaluation of the system for utility of data and user satisfaction. Implementation efforts and issues will be presented for criticism at public forums and in print.

COORDINATION: Several data bases at local and state levels currently exist (such as immunization, lead, WIC, EPSDT), with automation plans at various stages. Having developed contact with several municipal health departments and state agencies, in-depth discussion of technical issues, data needs and means of transfer to avoid duplication and protect security will be pursued.

EVALUATION: An independent evaluator will continue to study the implementation of CHN and utility of its data base. These further assessments will include the availability and utility of data for clinical care, its impact on care continuity, and families' and providers' acceptance of confidentiality protocols and other system features, including on-line services.

EXPERIENCE TO DATE: The Network has designed software and system architecture, and submitted these developments for presentation and publication. Direct contacts and notice in the press have resulted in additional interest. It has tested its design at two demonstration sites and is extending implementation to additional locations. Network members have established a core data base and implemented policies to protect patient confidentiality of medical record data among treatment and data repository sites.

ANNOTATION

Primary Care for inner city children is marked by non-uniform, disorganized data which are often unavailable to providers due to multiple-site usage or record unavailability. The Children's Health Network adapts and implements a region-wide patient-centered computerized uniform ambulatory care data set for infants and children in largely minority urban areas, useful for individual practices elsewhere as well. It will improve clinical decision-making, increase parent involvement with native-language hand-held records, permit longitudinal tracking for health outcome and utilization studies, and provide population-based aggregate data for state-level and managed care reporting, needs assessment and policy formation.

KEY WORDS:

Computer linkage
Data bases
Hispanics/Latinos
Minorities

Multi-Cultural/Multi-Lingual Population
Organization and Delivery of Health Services
Parent-Professional Communication
Puerto Ricans
Regional Health Networks
Urban Population

PROPOSAL ABSTRACT:

Project Title: Cost Benefit Analysis of Enhanced Perinatal Support Services in Medicaid Managed Care

Organization Name: Institute for Health Policy Studies, University of California at San Francisco

Address: 1388 Sutter St., 11th floor San Francisco, CA 94109

Project Director: Carol Korenbrot, Ph.D.

Phone: (415) 476-3094

Years: 3 **From:** 10 /01/96 to 9/30/99

Enhanced perinatal support services developed by Maternal and Child Health (MCH) programs enable women with limited resources to use medical and other services to optimize health outcomes for themselves and their infants. The provision of these support services, however, is currently threatened throughout the country by rapidly occurring changes in the health care system. Medicaid eligible populations are being rapidly enrolled in managed care plans and assigned to providers who do not provide these services. In addition, safety net providers who have traditionally provided these services, are finding it difficult to position themselves to contract to provide these services to managed care plans or providers.

We propose here a project to address this problem by providing a cost benefit model that federal, state and local policy officials can use to help demonstrate to manage care plans and providers under what conditions enhanced perinatal support services for their pregnant and parenting Medicaid enrollees can be cost beneficial to them. In addition the model will demonstrate different ways they could afford to either implement and provide, or contract for these services. To reach this goal we propose to develop a resource-based cost benefit model of enhanced perinatal support services to pregnant Medicaid managed care enrollees using data from California Medicaid managed care providers. The model will be constructed with input from state and local officials and plan and provider consultants. The model will be used to demonstrate a variety of alternative strategies for managed care plans and providers to provide the support services, determine their resource-based costs and evaluate their expected cost savings through effective services that avoid short-term, unnecessary costly perinatal services. From these resource costs, the model will also be used to extrapolate how providers and plans can translate the information on resources consumed into capitated rates to negotiate for the services, and the information on the areas of potential savings into indicators to monitor for cost effectiveness of the support services they provide.

In the first phase of the project we will develop a cost benefit model with consultants familiar both with the barriers to provider and plan implementation of support services and with the practical effects of managed care contracts, practice settings, staffing models and patient volume on enhanced perinatal support service delivery. We will survey Medicaid managed care providers for the profile of their practices and plan participation that are needed to compare the costs and benefits of providing the support services across a variety of delivery models. From the provider survey, 15 respondent

sites with a wide range of support service delivery models will be visited to determine whether they are appropriate to obtain the data needed for the cost benefit model. From those sites visited, five case study sites will be selected that represent a wide range of delivery models and are willing and able to participate in the data collection activities.

The second phase of the project will be one year of on-site data collection on resources consumed and unit financial costs of both the support services and costly perinatal services avoided with effective support service delivery. The third phase will be the use of the data collected in the cost benefit model to demonstrate resources consumed, costs incurred and potential and actual savings under the different delivery conditions that affect the costs and savings, with sensitivity analyses to assumptions and uncertain values used in the execution of the model.

The project results expected include both information and products that MCH officials can use to demonstrate to managed care plans and providers how enhanced perinatal support services can be implemented with a variety of associated costs and benefits. Achieving this goal is in turn expected to lead to an increase in the numbers of Medicaid managed care plans and providers that provide effective support services. To accomplish the goal there will be various products: 1) a report on the cost benefit analysis of the five alternative strategies used by the project sites selected to participate in this project; 2) a practical guide and computer spreadsheet of these five and 10 other strategies that managed care plans and providers can use to model costs and benefits for their own sites; and 3) a peer review journal article on the cost benefit model and costs and benefits of 15 alternative strategies for public health professionals. Didactic presentations, interactive workshops and hands-on computer demonstrations of the model and various alternative strategies will be presented at local and state MCH conferences and training sessions, and nationally at the American Public Health Association meetings.

MCH Information Resource Center
GRADUATE STUDENT INTERNSHIP PROGRAM (GSIP)
1998 Call for Participation and Fact Sheet

The Maternal and Child Health Information Resource Center (MCHIRC) was established by the Maternal and Child Health Bureau (MCHB) to enhance the management and analysis of MCH data for decision-making at the local, state, and federal levels and to provide a field of experience for MCH related trainees.

Objectives

One of the MCHIRC's primary goals is to improve data and analytic capacity for MCH decision-making in state MCH/CSHCN programs through the provision of technical assistance. In addition, the MCHIRC works to identify resources to help states develop data systems that will respond to local needs and federal reporting requirements. State data needs often cannot be resolved via the application of short term resources. Student field placements are a valuable existing resource that the MCHIRC can coordinate in an effort to provide technical assistance needed at the state level. The objectives of the GSIP are to:

Assist Schools of Public Health in placing student interns by: providing financial support for the intern; providing a linkage between the Schools of Public Health and state health agencies with a defined need that can be suitably met by graduate students; and providing a learning opportunity for graduate-level students.

Assist state and local MCH programs with clearly defined quantitative and analytic activities, such as analyzing, interpreting, and presenting useful data for policy-making decisions, conducting needs assessments, and responding to Title V reporting requirements.

Since its inception in 1992, the MCHIRC graduate student internship program has provided students with the opportunity to address specific, defined, data or analytic issues as a part of state efforts to develop or enhance MCH/CSHCN information systems. The program provides support funds and facilitates placement of graduate students in state MCH or CSHCN programs.

Process

Selected graduate student interns work on projects initiated by the state MCH or CSHCN Director. Intern projects facilitate the state's ability to conduct needs assessments, manage and analyze MCH data for decision-making, and respond to Title V reporting requirements, among other activities. State MCH and CSHCN Directors who identify an important problem and are prepared to participate in developing a solution are carefully matched with graduate student interns who have the technical skills and the knowledge to successfully complete the scope of work identified.

The MCHIRC graduate student internship program is based on the principles and guidelines used by current MCH programs within schools of public health, as well as the internship program at the Centers for Disease Control and Prevention, which is administered by the Association of Schools of Public Health.

Academia has traditionally agreed that field activity should be primarily oriented towards the student's need to learn rather than in response to the organization's need for assistance. It is our intent that the MCHIRC graduate student intern program provide meaningful learning opportunities for graduate students, while also providing advancement in capacity or capability for state MCH and/or CSHCN programs to use data and analysis for decision-making to improve the health of mothers and children.

Student Funds

MCHIRC graduate student intern program funds are used to provide stipends for students to participate in field placements, traditionally defined as a student experience which is under the supervision of faculty at a school of public health, but which occurs (in this instance) in a public health agency. Funds for this program are used at the student's discretion for travel to the internship site, housing, and daily living expenses. The MCHIRC graduate student intern program funds can not be used for indirect costs by any college, university, or health agency involved in this program.

State Proposals

MCHIRC encourages faculty and students who are considering or arranging field placements to not limit their interest to those health agencies in their immediate geographic vicinity. While placements "close to home" may be most convenient for the student, the limited number of schools of public health make it difficult for the majority of states to attract student interns to their health agencies.

MCHIRC staff encourages those health agencies who are interested in providing a field placement opportunity for a graduate student to find creative ways to make their state health agency more inviting to a student from a distant location. This might mean arranging economical lodging, providing for transportation, parking, and/or meals. The possibility of local college or university housing for a student intern, combined with the stipend available through the MCHIRC, makes an attractive combination for those students willing to consider a field placement out of their immediate geographic area.

State health departments are reminded that support funds are intended to support living expenses and are not generally recognized as salaries. While student interns are to be treated like contributing professionals, it is also important to remember that their public health training is not yet complete.

MCH Information Resource Center - Graduate Student Internship Program
Summary of Students' Activities, Summer 1997

Nine Master's of Public Health students traveled to states across the country this past summer to participate in the fourth year of the Maternal and Child Health Bureau's **Graduate Student Internship Program** (GSIP). The students, selected the previous winter from a pool of applicants, worked on diverse and challenging projects within state health departments. In the process, students enjoyed a unique opportunity to apply their analytical and quantitative skills in the field and interact with the populations affected by their projects. The following is a brief summary of the 1997 intern projects:

Jeffrey Powell of the **University of North Carolina at Chapel Hill** worked for the Healthy Families Alaska Program (HFAk) in **Anchorage, Alaska**. Jeffrey completed two documents for publication: *Healthy Families Alaska Data Management Guidelines* and *Teleconference Guidelines*. Preparation of these documents entailed analyzing the existing data collection system, evaluating the data collected (analyzing screening and assessment data and client demographics), compiling data from the HFAk quarterly reports, and coordinating forums to obtain staff feedback. Jeffrey reported on an overview of the database system to HFAk staff, and the guidelines will be published as part of the *State of Alaska Dataline* publication.

My Banh of the **Harvard School of Public Health** worked for the Children with Special Health Care Needs Program in **Little Rock, Arkansas**. My completed a comprehensive analysis and recommendations for the revision of the existing Parent Satisfaction Survey of parents of children who receive Children's Medical Services for CSHCN. My cleaned the existing database and ran analyses on 932 surveys using Epi Info software, and compared 1996 and 1997 data using a chi-square test. My's end product was a comprehensive manual that includes survey results reports by county and her recommended revisions of the Parent Satisfaction Survey.

Jennifer Shevlin of **Emory University** completed an internship on the Hospital Perinatal Data and Systems Project for the **Kansas** Department of Health and Environment. Jennifer completed a risk assessment of infant mortality and birth weights in Kansas with 1990 – 1995 data. Jennifer applied a variety of statistical analysis methods in her risk assessment within PC-SAS software. She then compared the data to the Annual Summary of Vital Statistics. Jennifer compiled a report of her research and presented it before completion of the internship.

Sophia Chen of the **Tulane School of Public Health** worked for the Children's Medical Services Program in **Baltimore, Maryland**. Sophia completed the preliminary data analysis of the high cost children within Children's Medical Services for the 1996 fiscal year, and analyzed preliminary data for the 1997 fiscal year. The results of Sophia's work were presented to the insurance commissioner of Maryland and HMOs. Sophia's research influenced an important policy decision: staff decided that it would be best to approach insurance companies for coverage of *all* uninsured children in the program as opposed to only the 'high cost' individuals.

MCH Information Resource Center - Graduate Student Internship Program

Summary of Students' Activities, Summer 1997 (Cont'd.)

Maja Altarac of the **Johns Hopkins University** completed an internship for the **Montana** Department of Health and Public Services. Maja was responsible for the development of health status indicators for county-level use. She reviewed existing health status reports, the Federal Title V Guidance and Performance Measurements, and Montana's Title V application. Maja developed two health indicators relevant to the MCH population: a Maternal and Infant Health Risk Indicator, and a Socio-Economic Risk Indicator. Maja then completed reliability and validity testing of the indicators and prepared and presented a final report to her supervisors and program staff.

Beth Canfield of the **Ohio State School of Public Health** worked for the **Ohio** Department of Health. Beth completed an assessment of the Family Planning Program. Her work included interviewing family planning data consultants, sending surveys to the consultants and local agencies, coding and analyzing survey data with **PCBSAS** and **Epi Info**, and **compiling a final report**.

Wilma Tilson of the **University of Alabama at Birmingham** completed her internship in **Tennessee**. Wilma collected alcohol and drug data for the state of Tennessee at county, regional, and state levels. She then organized the data into six useful categories for use by the regional health councils in their community diagnosis processes: assessment and planning; community service; evaluation and research; public information services; resources; and county-specific. Wilma completed a comparative analysis of the data at the three geographic levels, and compiled a final report.

Tonia Crossley of the **University of Alabama at Birmingham** completed her internship with the **Virginia** Department of Health. Tonia assessed the state's progress towards **Healthy People 2000 Objectives** by assessing five-year objectives within the state's Title V application and making statistical projections. Tonia selected 13 Objectives to assess, and identified the data sources that allowed the documentation of progress. She completed trend analyses using **SPSS** software. Finally, Tonia attended meetings within and outside of the Department of Health to facilitate collaboration for evaluation and recommendations.

Andrea Pernack of the **Yale University School of Public Health** completed her internship with the **Wisconsin** Department of Health and Family Services. Her primary task was the refinement of the MCH Information System used to monitor the Prenatal Care Coordination Program. Andrea evaluated current data status and needs, and assessed the linked file of birth, infant death, hospital discharge, and medical assistance data. Andrea determined that incomplete and/or inconsistent data was a problem at the local level, and that the problem existed within private sector agencies as well. She completed her internship with the preparation of a report on her findings, a presentation to the Wisconsin Center for Health Statistics, and liaison work with the Wisconsin Bureau of Health Care Financing and local prenatal care coordination providers.

MCH Information Resource Center Graduate Student Internship Program Year 4: Summer 1997

Nine Master's of Public Health students traveled to state health departments across the country this summer to participate in the fourth year of the Maternal and Child Health Bureau's **Graduate Student Internship Program** (GSIP). Participating students were selected from a competitive pool of nearly 30 applicants. The internship program provided students with a unique opportunity to apply their classroom analytical and quantitative skills in the field.

The GSIP, administered by the Maternal and Child Health Information Resource Center, was initiated to promote a mutually beneficial experience for both states and students. The program creates and strengthens ties between the academic community and state and local health departments. Following is a matrix of the summer internship projects that were completed in 1997.

State	Project Subject Area	Student and Degree/Program	School of Public Health Represented
Alaska	Healthy Families Alaska Program	<i>Jeffrey Powell</i> MPH in MCH	UNC Chapel Hill
Arkansas	Children with Special Health Care Needs Program	<i>My Banh</i> MS in MCH	Harvard
Kansas	Hospital Perinatal Data and Systems Project	<i>Jennifer Shevlin</i> MSPH in Epidemiology	Emory
Maryland	Children's Medical Services Program	<i>Sophia Chen</i> MPH in MCH	Tulane
Montana	Development of Health Status Indicators for County Level	<i>Maja Altarac</i> PhD in MCH	Johns Hopkins
Ohio	Family Planning Program Assessment	<i>Beth Canfield</i> MSPH	Ohio State
Tennessee	Pregnancy Risk Assessment and Monitoring	<i>Wilma Tilson</i> MPH in MCH	University of Alabama at Birmingham
Virginia	Progress Towards Healthy People 2000	<i>Tonia Crossley</i> MPH in MCH	University of Alabama at Birmingham
Wisconsin	Refinement of the MCH Information System	<i>Andrea Pernack</i> MPH in Epidemiology and Chronic Disease	Yale

